Commonwealth of Virginia

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

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Mathew J. Strickler
Secretary of Natural Resources

David K. Paylor
Director
(804) 698-4000

Jeffrey Hurst
Regional Director

May 5, 2020

Mr. Robert E. Weaver, Jr.
General Manager
Jewell Coke Company, L.P.
Dismal River Road
Oakwood, Virginia 24631

Location: Buchanan County
Registration No. 10200

Dear Mr. Weaver:

Attached is a minor modification to the November 17, 2017 Title V permit (as modified December 4, 2019), to operate a nonrecovery coke production facility pursuant to 9VAC5 Chapter 80 of the Virginia Regulations for the Control and Abatement of Air Pollution. This modified permit reflects changes pursuant to 9VAC5-80-210. This permit document replaces the permit document issued on November 17, 2017 (as modified December 4, 2019), however, the expiration date remains unchanged.
arriving at a final decision to issue this permit, the Department of Environmental Quality (DEQ) deemed the application complete on February 17, 2020.

This permit contains legally enforceable conditions. Failure to comply may result in a Notice of Violation and/or civil charges. Please read all permit conditions carefully.

This permit approval to operate shall not relieve Jewell Coke Company, L.P. of the responsibility to comply with all other local, state, and federal permit regulations
In the course of evaluating the application and

.

The Board's Regulations as contained in Title 9 of the Virginia Administrative Code 5-170-200 provide that you may request a formal hearing from this case decision by filing a petition with the Board within 30 days after this case decision notice was mailed or delivered to you. Please consult the relevant regulations for additional requirements for such requests.

As provided by Rule 2A:2 of the Supreme Court of Virginia, you have 30 days from the date you actually received this permit or the date on which it was mailed to you, whichever occurred first, within which to initiate an appeal of this decision by filing a Notice of Appeal with:

David K. Paylor, Director
Department of Environmental Quality
P. O. Box 1105
Richmond, VA 23218

If this permit was delivered to you by mail, three days are added to the thirty-day period in which to file an appeal. Please refer to Part Two A of the Rules of the Supreme Court of Virginia for information on the required content of the Notice of Appeal and for additional requirements governing appeals from decisions of administrative agencies.

If you have any questions concerning this permit, please contact Tom Derting at (276) 676-4831.

Sincerely,

Rob Feagins
Air Permit Manager

GRF/TMD/td/VA-SWRO10200_018_2020

Attachment: Permit

cc: Director, OAPP (electronic file submission)
Manager, Data Analysis (electronic file submission)
Office of Permits and Air Toxics (3AP10), U.S. EPA, Region III (electronic file submission)

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Federal Operating Permit
Article 1

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter 80, Article 1, of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, and 9 VAC 5-80-50 through 9 VAC 5-80-300, of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name:	Jewell Coke Company, L.P.
Facility Name:	Jewell Coke Company, L.P.
Facility Location:	1034 Dismal River Road Vansant, VA 24656
Registration Number:	10200
Permit Number:	SWRO-10200
Effective Date:	November 17, 2017
Modification Dates:	December 4, 2019, and May 5, 2020
Expiration Date:	November 16, 2022

This permit includes Federally Enforceable Requirements from the Clean Air Act.

Jeffrey Hurst
Regional Director
Signature Date: May 5, 2020

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Facility Information

Permittee
Jewell Coke Company, L.P.
1034 Dismal River Road
Vansant, VA 24656

Responsible Official
Mr. Robert E. Weaver, Jr.
General Manager

Facility
Jewell Coke Company, L.P.
1034 Dismal River Road
Vansant, VA 24656

Contact Person
Mr. Michael Hansel
Environmental Manager
276-935-3680

County-Plant Identification Number: 51-027-0004

Facility Description: SIC Code: 3312 - Jewell Coke Company, L.P., is a non-recovery, metallurgical coke production facility located on State Route 638, 3.6 miles east of Vansant, Virginia, along Dismal Creek in Buchanan County, Virginia.

Coal is transferred from the preparation plant at an adjacent facility and sent to the thermal dryer or stored in Coal Storage Pile 1 (Unit Reference 2) and/or Coal/Coke Storage Pile 2 (Unit Reference 3). Dried coal goes to a bin that feeds two parallel coal crushers (Unit Reference 25). The crushers are controlled by a baghouse (Device Reference 25). Only one crusher is used at a time - the other serves as an online spare. The coal bin and crushers are completely enclosed in a building. Coal is then transferred through a series of open and enclosed belts and conveyors (Unit Reference 4) to as many as 143 Thompson sole flue non-recovery coke ovens. The ovens are charged (Unit Reference 5) with coal while the backdraft emissions are collected by three baghouses (Device Reference 3, 4, and 5) located on each of the three pusher/charger machines (a baghouse is used but is not required for controlling emissions for charging on Battery B). The waste gas from the coking process (Unit Reference 1) in the ovens is controlled using common tunnel afterburners (Device Reference 2). Some of the waste gas from the thermal dryer ovens is sent to the thermal dryer (Unit Reference 13) to dry coal. Emissions from the thermal dryer are controlled by a Research Cottrell venturi scrubber (Device Reference 1). The coke is then pushed (Unit Reference 6) out of the ovens into hot cars located under an enclosure (Device Reference 10). The coke is then taken via the hot cars to the quench tower equipped with baffles (Device Reference 6 and 7) where cleaned water is dumped over the hot coke (Unit Reference 7). The coke is then dumped from the hot cars onto the coke wharf where a series of open and enclosed belts (Unit Reference 8) takes the coke to the coke processing plant.

Once the coke is received at the coke processing plant, a series of vibrators and screens separates the coke into appropriate sizes (Unit Reference 9). Most of the coke is loaded out into railcars (Unit Reference 09b). A small amount of coke may be placed in a bin for temporary storage and loaded from the bin into trucks. A baghouse (Device Reference BH01) collects the majority of the coke dust from the coke processing plant, while some of the dust is emitted as fugitive. Periodically, the material collected by the coke processing plant baghouse is mixed with the breeze produced by the coke processing plant in the Coal Coke and Breeze Storage Pile (Unit Reference 30a). Coke from the coke processing plant may also be taken to the Main Coke Storage Pile (Unit Reference 11). Coke from the piles may be taken and piled near the coke wharfs (Unit Reference 12) and blended back into the coke handling system. Quench pit solids removed from the bottom of the quench pit ponds may also be recovered and piled near the coke wharfs (Unit Reference 14) and blended back into the coke handling system.

The facility is a Title V major source of particulate matter (PM10), sulfur dioxide (SO_2), hydrogen chloride (HCl), greenhouse gases (GHGs), and nitrogen oxides (NOx) emissions. This source is located in an attainment area for all pollutants.

The source is permitted under the NSR permit dated November 19, 2019.

Emission Units

Equipment to be operated consists of:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
01*	S-2 through S-17	143 Thompson Sole Flue Non-Recovery Coke Ovens	45-55.1 tons/oven/48hrs input**	Common Tunnel Afterburners	02	PM, PM10, PM2.5, VOCs, CO	NSR Permit dated 11/19/2019
04	F2	Coal Handling	1200 tons/hr input	N/A	N/A	N/A	NSR Permit dated 11/19/2019
05	S-18, S-19, S-20, F-15	Coal Charging	1200 tons/hr input	(3) Donaldson Torit Baghouses, or equivalent	03, 04, 05	PM, PM10 , PM2.5	NSR Permit dated 11/19/2019
06	F3	Coke Pushing	825 tons/hr input	shed	10	PM, PM10 , PM2.5	NSR Permit dated 11/19/2019
07	S-21, S-22	Coke Quenching	825 tons/hr input	Quench Tower Baffles	06, 07	PM, PM10 , PM2.5	NSR Permit dated 11/19/2019
08	F6	Coke Handling	825 tons/hr input	N/A	N/A	PM, PM10 , PM2.5	NSR Permit dated 11/19/2019
09	S29a	Coke Screening	825 tons/hr	baghouse	BH01	PM, PM10 , PM2.5	NSR Permit dated 11/19/2019
09a	F07a	Oversize coke recirculating conveyor	150 tons/hr	enclosure	------	PM, PM10 , PM2.5	NSR Permit dated 11/19/2019
09b	F07b	Coke loadout	600 tons/hr	N/A	-----	------	NSR Permit dated 11/19/2019
09c	F07c	One breeze bunker transfer conveyor	100 tons/hr	partial enclosure	------	PM, PM10 , PM2.5	NSR Permit dated 11/19/2019
09d	F07d	One coke sample conveyor	0.1 tons/hr	enclosure	------	PM, PM10 , PM2.5	NSR Permit dated 11/19/2019
09e	F07e	One coke transfer conveyor	825 tons/hr	N/A	-----	------	NSR Permit dated 11/19/2019
09f	F07f	One coke transfer conveyor	825 tons/hr	N/A	-----	------	NSR Permit dated 11/19/2019
13	S-1	Heyl & Patterson Model 135 Thermal Dryer	600 tons/hr	Research Cottrell Venturi Scrubber	01	PM, PM10, PM2.5, SO2	NSR Permit dated 11/19/2019

*Oven Batteries 3B, 3C, 2D, 2E, 3F, and 3G.
**Charging rate may vary.

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
25a	F18a	Two Pennsylvania crushers, Coal Paktor	400 tons/hr each	enclosure	-----	PM, PM10 , PM2.5	NSR Permit dated 11/19/2019
25b	F18a	One 36"x135' coal belt conveyor	400 tons/hr	enclosure	-----	------	NSR Permit dated 11/19/2019
25c	S-25	One feed bin with coal feeders	150 tons	bin vent	25	PM, PM10 , PM2.5	NSR Permit dated 11/19/2019
25d	F18a	One 36"x85' crushed coal and coke belt conveyor	400 tons/hr	enclosure	-----	-----	NSR Permit dated 11/19/2019
25e	F18a	One 36"x200' crushed coal and coke belt conveyor	400 tons/hr	enclosure	------	------	NSR Permit dated 11/19/2019
25f	F-2	Bypass conveyor (loading)	400 tons/hr	enclosure	------	PM, PM10 , PM2.5	--------
25g	F-2	Bypass conveyor (discharge)	400 tons/hr	----------	------	uncontrolled	--------
25h	F-2	Coal loadout conveyor (loading)	400 tons/hr	enclosure	------	PM, PM10 , PM2.5	--------
25i	F-2	Coal loadout conveyor (discharge)	400 tons/hr	----------	------	uncontrolled	--------
25j	F-2	Truck loadout	400 tons/hr	----------	------	uncontrolled	--------
30a	----	Coal/coke breeze storage pile	825 tons/hr	--------	------	------	NSR Permit dated 11/19/2019

Coking Equipment Requirements - (Emission Unit ID Nos. 01, 05, 13)

1. **Coking Equipment Requirements - Coke Manufacture - (emission unit ID# 01) - Limitations** - The particulate, VOC, and CO emissions from all of the ovens at the facility shall be controlled by sole flues, common waste heat tunnels/afterburners, and good combustion practices. The ovens and appurtenances shall be provided with adequate access for inspection.
(9 VAC 5-80-110 and Condition 4 of the 11/19/2019 NSR permit)

2. **Coking Equipment Requirements - Coke Manufacture - (emission unit ID# 05) - Limitations** - The backdraft fugitive emissions from the charging of each of the ovens at Batteries 3C, 2D, 2E, 3F, and 3G shall be controlled by a collection apparatus (hood or equivalent) utilizing a Donaldson-Torit cartridge filtration system or equivalent. The control system shall be provided with adequate access for inspection.
(9 VAC 5-80-110 and Condition 8 of the 11/19/2019 NSR permit)

3. **Coking Equipment Requirements - Coke Manufacture - (emission unit ID# 01) - Limitations** - Hourly emissions from the operation of the coke ovens at the facility shall not exceed the limits as shown in the table below, depending on the number of ovens in operation. When charge tonnage exceeds 45 tons in one or more ovens, one or more ovens in Battery 3B shall be shutdown, according to the table shown below.

Battery 3B Oven Limits

Charge (tons)	SO_2	NOx	Part.	PM10	Lead
45.0	10.0	0.94	1.4	1.4	0.01

Battery 3C, 2D, 2E, 3F, 3G Oven Limits

Operating Ovens			New Oven Limits (lb/hr/oven)					
3B	New	Total	Tons	SO_2	NOx	Part.	PM10	Lead
26	116	142	45.0	10.0	0.94	0.92	0.92	0.01
25	116	141	45.4	10.1	0.95	0.93	0.93	0.01
24	116	140	45.8	10.2	0.95	0.94	0.94	0.01
23	116	139	46.2	10.3	0.96	0.95	0.95	0.01
22	116	138	46.6	10.2	0.95	0.94	0.94	0.01
21	116	137	46.9	10.4	0.98	0.98	0.98	0.01
20	116	136	47.3	10.5	0.99	0.99	0.99	0.01
19	116	135	47.7	10.6	0.99	1.00	1.00	0.01
18	116	134	48.1	10.7	1.00	1.01	1.01	0.01
17	116	133	48.5	10.8	1.01	1.02	1.02	0.01
16	116	132	48.9	10.9	1.02	1.04	1.04	0.01
15	116	131	49.3	10.9	1.03	1.05	1.05	0.01
14	116	130	49.7	11.0	1.03	1.06	1.06	0.01
13	116	129	50.0	11.1	1.04	1.07	1.07	0.01
12	116	128	50.4	11.2	1.05	1.08	1.08	0.01

Operating Ovens			New Oven Limits (lb/hr/oven)					
3B	New	Total	Tons	SO_2	NOx	Part.	PM10	Lead
11	116	127	50.8	11.3	1.06	1.10	1.10	0.01
10	116	126	51.2	11.4	1.07	1.11	1.11	0.01
9	116	125	51.6	11.5	1.07	1.12	1.12	0.01
8	116	124	52.0	11.5	1.08	1.13	1.13	0.01
7	116	123	52.4	11.6	1.09	1.14	1.14	0.01
6	116	122	52.8	11.7	1.10	1.15	1.15	0.01
5	116	121	53.1	11.8	1.11	1.17	1.17	0.01
4	116	120	53.5	11.9	1.12	1.18	1.18	0.01
3	116	119	53.9	12.0	1.12	1.19	1.19	0.01
2	116	118	54.3	12.1	1.13	1.20	1.20	0.01
1	116	117	54.7	12.1	1.14	1.21	1.21	0.01
0	116	116	55.1	12.2	1.15	1.23	1.23	0.01

The hourly emission limits shown above are maximum per oven limits based on the number of ovens operating. Compliance with these emission limits shall be as stated in Condition 12 of this permit. It shall in no way be construed that operation of the facility within the above stated hourly limits implies source compliance on an annual basis. Actual annual emission limits are based on the total allowable coal consumption as outlined in Condition 5, and the total emissions as outlined in Condition 4.
(9 VAC 5-80-110, 9 VAC 5-50-180, 9 VAC 5-50-260 and Condition 10 of the 11/19/2019 NSR permit)

4. **Coking Equipment Requirements - Coke Manufacture - (emission unit ID# 01, 13) - Limitations** - Total plantwide emissions from the operation of the thermal dryer and 143 ovens at the facility, while consuming coal as outlined in Condition 5 of this permit, shall not exceed the limitations specified below, calculated monthly as the sum of each consecutive 12 month period

Particulate Matter	553.3 tons/yr
PM10	553.3 tons/yr
Sulfur Dioxide (SO_2)	5086.8 tons/yr
Nitrogen Oxides (NOx)	520.8 tons/yr
Lead	5.2 tons/yr

At no time shall there be more than 143 ovens in operation at the facility.
(9 VAC 5-80-110, 9 VAC 5-50-260 and Conditions 11 and 17 of the 11/19/2019 NSR permit)

5. **Coking Equipment Requirements - Coke Manufacture - (emission unit ID# 01, 13) - Limitations** - The plantwide coking process shall consume no more than the amount of coal per year specified by the following equation (which is illustrated in the graph in Attachment A to this permit), calculated monthly as the sum of each consecutive 12 month period:

Max. coal charge (T/yr) = (9.92 x Dryer hours per yr) + [839,822/(%S)]

In no event shall the coal charged to the ovens exceed 1,041,510 tons per year.

The formula in this condition is valid for certain ranges of values for sulfur content and dryer operating hours, as illustrated in the graphical representation in Attachment A. At conditions where actual operating parameters are outside the illustrated ranges and the formula produces a calculated tonnage in excess of 1,041,510, the limitation of 1,041,510 prevails and the resultant formula-calculated tonnage is not relevant to compliance with the condition. The express purpose of this condition is to allow flexibility for the source to operate under conditions of varying coal sulfur content and dryer operating hours, and still be able to process 1,041,510 tons per year of coal. The formula in this condition allows the source to, for example, process coal with up to 0.88 weight percent sulfur and either reduce overall coal consumption or increase dryer operating hours, or a balance of the two. It is also implicit in this permit condition that the source could process up to 1,041,510 tons of coal per year, provided that they comply with the coal sulfur content limit, permit sulfur dioxide limits, etc.
(9 VAC 5-80-110, 9 VAC 5-170-160, and Condition 22 of the 11/19/2019 NSR permit)

6. **Coking Equipment Requirements - Coke Manufacture - (emission unit ID# 01) - Limitations** - Visible emissions from each backdraft filter exhaust shall not exceed ten percent (10%) opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).
(9 VAC 5-80-110 and Condition 25 of the 11/19/2019 NSR permit)

7. **Coking Equipment Requirements - Coke Manufacture - (emission unit ID# 01) - Limitations** - The following requirements applicable to visible emissions from charging operations are from 40 CFR 63 Subpart L. The facility shall be operated in compliance with Federal requirements under 40 CFR 63, Subpart L, and with the requirements of 40 CFR part 63, subpart A. All terms used regarding 40 CFR 63, Subpart L shall have the meanings as defined in 40 CFR 63.301 and 40 CFR 63.2.
(9 VAC 5-60-100, 40 CFR 63.300, 40 CFR 63, Subpart A)

   Note: There is no requirement for a collection hood for charging emissions for the Battery 3B ovens. The Battery 3B ovens were constructed/installed in May 1989.

   a. The permittee shall meet the requirements of 40 CFR 63.303(a)(1) by (a) 0.0 percent leaking coke oven doors as defined by the procedures in 40 CFR 63.309(d)(1); or, (b) the permittee shall monitor and record, once per day for each day of operation, the direction of air flow in each oven or common battery tunnel to ensure that the ovens are operated under negative pressure.

   b. For charging operations, the permittee shall install, operate, and maintain an emission control system on all ovens, except for the Battery 3B ovens, for the capture and collection of emissions in a manner consistent with good air pollution control practices for minimizing emissions from the charging operations.

   c. For charging operations, for each day of operation, the permittee shall have and implement an emissions control work practice plan (Attachment B) in accordance with

40 CFR 63.306 for each nonrecovery oven battery, the components of which are as follows:

(1) An initial and refresher training program for all coke plant operating personnel with responsibilities that impact emissions, including contractors, in job requirements related to emission control. The training program must include:
   (a) A list, by job title, of all personnel that are required to be trained and the emission points associated with each job title;
   (b) An outline of the subjects to be covered in the initial and refresher training for each group of personnel;
   (c) A description of the training methods;
   (d) A statement of the duration of initial training and the duration and frequency of refresher training;
   (e) A description of the methods to be used at the completion of all training to demonstrate successful completion; and
   (f) A description of the procedure to be used to document performance of plan requirements pertaining to daily operation of the coke oven battery and its emission control equipment.

(2) Procedures for controlling emissions from nonrecovery coke oven batteries including:
   (a) Procedures for charging coal into the oven;
   (b) If applicable, procedures for the capture and control of charging emissions;
   (c) Procedures for cleaning coke from the door sill area for both sides of the battery after completing the pushing operation and before replacing the coke oven door;
   (d) Procedures for cleaning coal from the door sill area after charging and before replacing the push side door;
   (e) Procedures for filling gaps around the door perimeter with sealant material, if applicable, and
   (f) Procedures for detecting and controlling emissions from smoldering coal.

(3) Procedures for maintaining, for each emission point subject to visible emission limitations under Subpart L, a daily record of the performance of plan requirements pertaining to the daily operation of the coke oven battery and its emission control equipment, including:
   (a) Procedures for recording the performance of such plan requirements; and
   (b) Procedures for certifying the accuracy of such records by the permittee.

(4) The permittee shall revise the emissions work practice control plan in accordance with requirements of 40 CFR 63.306(d).

(5) The permittee shall include a written startup, shutdown and malfunction section in the work practice plan in accordance with 40 CFR 63.310. This section shall describe procedures for operating the battery, including associated air pollution control equipment during a startup, shutdown, or malfunction in a manner consistent with good air pollution control practices for minimizing emissions;

and procedures for correcting and reporting a malfunction as quickly as practicable.

d. The permittee shall follow reporting and recordkeeping requirements as stated in 40 CFR 63.311, including the following:

(1) Notification

The permittee shall notify the Administrator of the intent to construct a new coke oven battery (including reconstruction of an existing coke oven battery), including the anticipated date of startup.

(2) Semiannual compliance certification

(a) Certification, signed by the permittee, that a startup, shutdown, or malfunction event did not occur for a coke oven battery during the reporting period or that a startup, shutdown, and malfunction event did occur and a report was submitted according to the requirements in 40 CFR 63.310(e), and

(b) Certification, signed by the permittee, that work practices were implemented if applicable under 40 CFR 63.306.

(3) Recordkeeping

(a) The permittee shall maintain all required data and information in a permanent form suitable for inspection onsite for at least one year and must thereafter be accessible within 3 working days to the Administrator for a period of 5 years from the date of the data and information. The emissions control work practice plan shall be kept onsite at all times. The permittee shall maintain the following data and information:

(i) Records of daily pressure (direction of air flow) monitoring;

(ii) Records demonstrating the performance of work practice requirements according to 40 CFR 63.306(b)(7);

(iii) Design characteristics of each emission control system for the capture and collection of charging emissions, as required by 40 CFR 63.303(b)(2);

(iv) A copy of the work practice plan required by 40 CFR 63.306 and any revision to the plan; and

(v) Records specified in 40 CFR 63.310(f) regarding the basis for each malfunction notification.

(40 CFR 63.300; 303, 304(c), 306(a), (b)(1)(6)(7)(8), (c), (d); 310 - 313; 9 VAC 5-50-20E, 9 VAC 5-80-110, 9 VAC 5-80-110E2, and 9 VAC 5-170-160)

8. **Coking Equipment Requirements - Coke Manufacture - (emission unit ID# 01) - Monitoring** - Monitoring to comply with the MACT Standard, 40 CFR 63, Subpart L, shall consist of the following:

a. Monitor the direction of air flow for each common battery tunnel daily to ensure that the oven is operating under a negative pressure. Monitoring will be performed by opening a damper in the common tunnel of each battery to assure that air enters the

tunnel through the open damper and ensuring that the battery is operating under negative pressure (refer to permittee's Work Practice Control Plan, Attachment B).

b. Implement procedures in the permittee's Work Practice Control Plan, for controlling emissions from charging operations, cleaning of oven door sills, operating procedures using the Donaldson-Torit Filtration System, or equivalent, auditing of performance of plan requirements, procedures for startup, shutdown and malfunctions, and training.

(9 VAC 5-80-110, 9 VAC 5-80-110F and 40 CFR 63.303, 306)

9. **Coking Equipment Requirements - Coke Manufacture - (emission unit ID# 01) - Reporting** -The permittee shall submit monitoring information to demonstrate compliance with the MACT Standard on March 1 and September 1 of each calendar year.
(9 VAC 5-80-110 and 40 CFR 63.303, 306)

10. **Coking Equipment Requirements - Coke Manufacture - (emission unit ID# 01) - Recordkeeping** - The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Southwest Regional Office. These records shall include, but are not limited to:

a. The daily, monthly and yearly quantities of coal charged to each oven at the facility, and daily, monthly and yearly coke production.

b. Coal shipments processed, indicating sulfur, ash, volatile, and moisture content per shipment.

c. Monthly average of sulfur content of coal charged to the ovens.

d. Total number of operating and non-operating ovens each month.

e. Coke analysis data indicating moisture, sulfur, and volatile content.

f. The total number of operating hours per month for each oven.

g. The number of cumulative days each oven is operating at 50 tons or more of coal charges.

h. Hourly emissions, calculated as a monthly average (as stated in Condition 12.b. of this permit), for each pollutant as limited in Condition 3 of this permit.

i. Annual emissions of SO_2 shall be calculated monthly as follows:

$$SO_2 \text{ (T/yr)} = 0.006057 \times (\%S) \times [\text{charge tonnage} - (9.92 \times \text{dryer hours})]$$

Annual emissions shall be calculated monthly as the sum of each consecutive 12-month period.

j. Annual emissions for the remaining criteria pollutants in this permit shall be calculated using the annual coal charge and the pollutant-specific emission factors, based on performance testing, for both Battery 3B and the other oven batteries. Annual emissions shall be calculated monthly as the sum of each consecutive 12-month period.

k. Results of any performance testing for the batteries.

l. Annual quantity of coal charged to all ovens at the facility, calculated monthly as the sum of each consecutive 12-month period.

m. The daily pressure (direction of air flow) in each common operating battery tunnel. (40 CFR 63.311).

n. Notification for New Coke Oven Construction or Reconstruction of Existing Oven and Notification of Malfunction. (40 CFR 63.311)

o. Semiannual compliance certifications. (40 CFR 63.311)

p. A copy of the Work Practice Plan. (40 CFR 63.311)

q. Design characteristics of the emission control system for collection of charging emissions from the ovens. (40 CFR 63.311)

r. Basis for each malfunction notification. (40 CFR 63.311)

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.
(9 VAC 5-50-50, 9 VAC 5-80-110, Condition 40 of the 11/19/2019 NSR permit, and 40 CFR 63.311)

11. **Coking Equipment Requirements - Coke Manufacture - (emission unit ID# 01) - Performance Testing** - At such time that any set of at least nine (9) ovens are operated on 72-hour charge cycles for 30 consecutive days or more, performance tests shall be conducted for particulate matter, sulfur dioxide, and nitrogen oxides from representative stacks on the ovens to determine compliance with the emission limits contained in Condition 3 of this permit. For batteries that provide heat to the thermal dryer, the tests shall be conducted while the thermal dryer is not in operation and no waste heat is being recovered from any oven in the battery and while each oven is operating on 72-hour charge cycles. Tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30 and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410. The details of the tests are to be arranged with the Director, Southwest Regional Office. The permittee shall submit a test protocol at least thirty (30) days prior to testing. Two (2) copies of the test results shall be submitted to the Director, Southwest Regional Office within 45 days after test completion and shall conform to the test report format enclosed with this permit.
(9 VAC 5-80-110 and Condition 35 of the 11/19/2019 NSR permit)

12. **Coking Equipment Requirements - Coke Manufacture - (emission unit ID# 01)- Performance Testing** - Compliance with the emission limits in Condition 3 of this permit shall be demonstrated by (a) performance testing and/or by (b) calculation, as described below, or by other methods approved by DEQ:

a. After coal charge tonnage to more than two ovens is 50 tons or more each for 30 cumulative days, performance testing shall be completed within 60 days from that date. The test shall be conducted for particulate matter, sulfur dioxide, and nitrogen oxides on a representative stack of one operating battery (3C, 2D, 2E, 3F, or 3G) to demonstrate compliance with the emission limits in Condition 3 of this permit, using the maximum amount of coal charge that can efficiently be coked out. A maximum of two performance tests shall be required to satisfy this condition. Each performance

test shall be conducted on a different operating battery containing those ovens charging 50 tons or more. For batteries that provide heat to the thermal dryer, the tests shall be conducted while the thermal dryer is not in operation and no waste heat is being recovered from any oven in the battery. Tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30 and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410. The details of the tests (methods, procedures, timing, etc.) are to be arranged with the Director, Southwest Regional Office. The permittee shall submit a test protocol at least thirty days prior to testing. Two copies of the test results shall be submitted to the Director, Southwest Regional Office within 45 days after test completion and shall conform to the test report format enclosed with this permit.
(9 VAC 5-50-30, 9 VAC 5-50-260, 9 VAC 5-80-110, Condition 34 of the 11/19/2019 NSR permit, and 9 VAC 5-80-10 H)

b. The permittee shall maintain records of actual emissions from the coke ovens. The content and format of such records shall be arranged with the Director, Southwest Regional Office. At a minimum, actual emission calculations shall use operational data as required by Condition 10 of this permit, for demonstration of compliance with the Condition 3 limits of this permit.
(9 VAC 5-50-260, Condition 34 of the 11/19/2019 NSR permit, and 9 VAC 5-80-110)

13. **Coking Equipment Requirements - Coke Manufacture - (emission unit ID# 01) - Performance Testing** - The permittee shall complete performance testing on the exhaust stacks of two or more coke oven batteries, at least once every five calendar years. Tests shall not be repeated on any battery until all six batteries have been tested. This permit condition does not require that testing of batteries be done simultaneously. Individual battery testing may be done any time during the five year period, provided all other terms and requirements of this permit are met.

a. Batteries 2D, 2E, 3B, 3C, 3F or 3G.

For each battery tested, the performance test details are as follows:

b. The tests shall be performed and compliance determined for nitrogen oxides, sulfur dioxide, particulate matter (PM10), lead, mercury, and hydrogen chloride.

c. Each test shall consist of three runs at the maximum production rate of the oven.

d. The tests shall be performed, reported, and compliance demonstrated (where permit and/or regulatory limits apply) any time after permit issuance but no later than 18 months prior to the expiration date of this permit.

e. The details of the tests, including approval of test methods for the criteria pollutants and hazardous air pollutants, are to be arranged with the Director, Southwest Regional Office.

f. The permittee shall submit a test protocol at least 30 days prior to testing.

g. The permittee shall submit notifications for the test protocol submittal.

h. Two copies of the test results shall be submitted to the Director, Southwest Regional Office within 45 days after test completion and shall conform to the test report format enclosed with this permit.
(9 VAC 5-80-110)

14. **Coking Equipment Requirements - Coke Manufacture - (emission unit ID# 01) - Testing** -The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.
(9 VAC 5-80-110, 9 VAC 5-50-30, and Condition 21 of the 11/19/2019 NSR permit)

15. **Coking Equipment Requirements - Coke Manufacture - (emission unit ID# 01) - Testing** - If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ. Testing conducted to determine compliance with particulate matter and PM10 limits in this permit should be based on methods that measure filterable particulate matter or PM10. Nothing in this condition limits DEQ's authority or ability to request testing for filterable and/or condensable particulate matter emissions.
(9 VAC 5-80-110)

16. **Coking Equipment Requirements - Coke Manufacture - (emission unit ID# 01) - Notification** - The permittee shall furnish written notification to the Director, Southwest Regional Office of the anticipated date(s) of performance tests specified in Conditions 11 and 12 of this permit, postmarked at least thirty (30) days prior to such date(s).
(9 VAC 5-170-160, 9 VAC 5-80-110, and Condition 37 of the 11/19/2019 NSR permit)

Process Equipment Requirements (Emission Unit ID Nos. 13, 09, 25)

17. **Process Equipment Requirements - (emission unit ID# 13) - Limitations** - Sulfur dioxide and particulate matter emissions from the operation of the Heyl and Patterson thermal coal dryer shall be controlled by operation of a high energy venturi scrubber. The pH of the high energy venturi scrubber liquid shall be maintained at an average level not less than 7.5 as specified in Condition 22 of this permit. Appropriate procedures shall be maintained by the permittee for maintaining scrubber liquid pH. The scrubber shall be provided with adequate access for inspection. The scrubber shall be equipped with a device to continuously measure the differential pressure through the scrubber.
(9 VAC 5-80-110, 9 VAC 5-50-260, and Condition 9 of the 11/19/2019 NSR permit)

18. **Process Equipment Requirements - (emission unit ID# 13) - Limitations** - Emissions from the operation of the thermal coal dryer shall not exceed the limits specified below, calculated monthly as the sum of each consecutive 12 month period:

Particulate Matter	0.031 gr/dscf	7.88 lbs/hr	34.6 tons/yr
PM10	0.031 gr/dscf	7.88 lbs/hr	34.6 tons/yr
Sulfur Dioxide		1.4 lbs/hr	3.9 tons/yr

It shall in no way be construed that operation of the facility within the above stated hourly limits implies source compliance on an annual basis. Actual annual plantwide emissions

are based on the total allowable plantwide coal consumption as outlined in Condition 5 of this permit, and the total plantwide emissions as outlined in Condition 4 of this permit.
(9 VAC 5-50-260, 9 VAC 5-80-110 and Condition 16 of the 11/19/2019 NSR permit)

19. **Process Equipment Requirements - (emission unit ID# 13) - Limitations** - In no event, shall the dryer be operated less than the number of hours per year specified by the following equation (which is illustrated in Attachment A to this permit), calculated monthly as the sum of each consecutive 12 month period:

    Min. dryer operation (hr/yr) = [0.1008065 x Coal charged (T/yr)] - [84,660/(%S)]

    The total plantwide facility emission limits are specified in Condition 4 of this permit, and the coal input limits are specified in Condition 5 of this permit. Sulfur content of the coal shall not exceed 0.88%.

    The formula in this condition allows the source to, for example, process coal with up to 0.88 weight percent sulfur and either reduce overall coal consumption or increase dryer operating hours, or a balance of the two. It is also implicit in this permit condition that the source could process up to 1,041,510 tons of coal per year, provided that they comply with the coal sulfur content limit, permit sulfur dioxide limits, etc.
    (9 VAC 170-160, 9 VAC 5-80-110 and Condition 19 of the 11/19/2019 NSR permit)

20. **Process Equipment Requirements - (emission unit ID# 13) - Limitations** - The approved fuel for the Heyl & Patterson thermal coal dryer is waste heat from the operation of coke ovens at Battery 2E. A change in the fuel may require a permit to modify and operate.
    (9 VAC 5-80-110, 9 VAC 5-80-1180, and Condition 20 of the 11/19/2019 NSR permit)

21. **Process Equipment Requirements - (emission unit ID# 13) - Limitations** - The thermal coal dryer is to be operated in compliance with federal emission requirements under 40 CFR, Part 60, Subpart Y, Standards of Performance for Coal Preparation Plants.
    (9 VAC 5-50-410, 9 VAC 5-80-110 and Condition 28 of the 11/19/2019 NSR permit; and 40 CFR 60, Subpart Y)

22. **Process Equipment Requirements - (emission unit ID# 13) - Monitoring** - The permittee shall continuously monitor and record for each hour of operation, the pH of the venturi scrubber liquid. The pH of the scrubber liquid shall be maintained at an average level not less than 7.5.
    (9 VAC 5-80-110 and Condition 9 of the 11/19/2019 NSR permit)

23. **Process Equipment Requirements - (emission unit ID# 13) - Monitoring** - The permittee shall continuously monitor the temperature of the gas stream exiting the thermal dryer. The temperature monitoring device shall be certified by the manufacturer to be accurate within ± 3°F.
    (Condition 28 of the 11/19/2019 NSR permit; and 40 CFR 60.256(a)(1)(i), Subpart Y)

24. **Process Equipment Requirements - (emission unit ID# 13) - Monitoring** - The permittee shall continuously monitor and record for each hour of operation, the pressure drop through

the venturi scrubber. The monitoring device shall be certified by the manufacturer to be accurate within ± 1 inch water gauge.
(Conditions 9 and 28 of the 11/19/2019 NSR permit; and 40 CFR 60.256 (a)(1)(ii), Subpart Y)

25. **Process Equipment Requirements - (emission unit ID# 13) - Monitoring** - The permittee shall continuously monitor and record for each hour of operation, the water supply pressure to the venturi scrubber. The monitoring device is to be certified by the manufacturer to be accurate within ± 5 percent of design water pressure.
(Condition 28 of the 11/19/2019 NSR permit; and 40 CFR 60.256(a)(1)(ii)(B), Subpart Y)

26. **Process Equipment Requirements - (emission unit ID# 13) - Monitoring** - All monitoring devices in Conditions 22-25 above are to be recalibrated annually.
(40 CFR 60.256(a)(2), Subpart Y)

27. **Process Equipment Requirements - (emission unit ID# 13) - Monitoring** - For Conditions 23 and 24 above, the permittee shall establish a normal operating range of data so that any deviations or malfunctions can be determined.
(VAC 5-80-110; 40 CFR 60.256(a)(b), Subpart Y)

28. **Process Equipment Requirements - (emission unit ID# 13) - Monitoring** - The permittee shall monitor, operate, calibrate and maintain the thermal dryer with venturi scrubber according to the following plan:

	INDICATOR No. 1	INDICATOR No. 2	INDICATOR No. 3
	Liquid pH	Pressure Drop	Water Supply Pressure
I. Measurement Approach	pH for the scrubber liquid is measured continuously using a pH meter.	Pressure drop across the venturi is measured continuously using a differential pressure gauge.	Pressure drop is measured continuously using a pressure gauge.
II. Indicator Range	An excursion is defined as an average level less than 7.5; excursions trigger an inspection, corrective action, and reporting requirement.	An excursion is a pressure drop less than 20 inches w.c. Excursions trigger an inspection, corrective action, and a reporting requirement.	An excursion is defined as a pressure less than 12 psig. Excursions trigger an inspection, corrective action, and a reporting requirement.
III. Performance Criteria A. Data Representativeness	pH meter will be located in the tank to measure the scrubber liquid.	The differential pressure gauge monitors the static pressures across the venture scrubber.	The water pressure gauge monitors water supply pressure to the scrubber. The gauge is located close to the water discharge point.
B. Verification of Operational Status	Recorded hourly when operating.	Recorded hourly when operating.	Recorded hourly when operating.
C. QA/QC Practices and Criteria	Calibrate the pH meter annually. Maintenance according to manufacturer's specifications.	The device is to be certified by the manufacturer to be accurate within ±1 inch water gauge and calibrated annually based on manufacturer's recommendation. Maintenance according to manufacturer's specifications.	The device is to be certified by the manufacturer to be accurate within ±5% of design water supply pressure and calibrated annually based on manufacturer's recommendation. Maintenance according to manufacturer's specifications.
D. Monitoring Frequency	Continuous when operating.	Continuous when operating.	Continuous when operating.
E. Data Collection Procedures	Record pH every hour when operating	Record pressure drop every hour when operating	Record water pressure every hour when operating
F. Averaging Period	24-hour	None	None

(9 VAC 5-80-110 and 40 CFR 64)

29. **Process Equipment Requirements - (emission unit ID# 13) - Monitoring** - The permittee shall conduct the monitoring and fulfill the other obligations specified in 40 CFR 64.7 through 40 CFR 64.9.
(9 VAC 5-80-110 E and 40 CFR 64.6 (c))

30. **Process Equipment Requirements - (emission unit ID# 13) - Monitoring** - At all times, the permittee shall maintain the monitoring equipment, including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
(9 VAC 5-80-110 E and 40 CFR 64.7 (b))

31. **Process Equipment Requirements - (emission unit ID# 13) - Monitoring** - Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the thermal dryer and venturi scrubber are operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of compliance assurance monitoring, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by inadequate maintenance or improper operation are not malfunctions.
(9 VAC 5-80-110 E and 40 CFR 64.7 (c))

32. **Process Equipment Requirements - (emission unit ID# 13) - Monitoring** - Upon detecting an excursion or exceedance, the permittee shall restore operation of the thermal dryer (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup and shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator, designated condition, or below the applicable emission limitation or standard, as applicable.
(9 VAC 5-80-110 E and 40 CFR 64.7 (d)(1))

33. **Process Equipment Requirements - (emission unit ID# 13) - Monitoring** - Determination that acceptable procedures were used in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.
(9 VAC 5-80-110 E and 40 CFR 64.7(d)(2))

34. **Process Equipment Requirements - (emission unit ID# 13) - Monitoring** - If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Director, Southwest Regional Office and, if necessary, submit a proposed modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.
(9 VAC 5-80-110 E and 40 CFR 64.7(e))

35. **Process Equipment Requirements - (emission unit ID# 13) - Monitoring** - If the number of exceedances or excursions exceeds 5 percent duration of the operating time for the thermal dryer for a semiannual reporting period, the permittee shall develop, implement and maintain a Quality Improvement Plan (QIP) in accordance with 40 CFR 64.8. If a QIP is required, the permittee shall have it available for inspection. The QIP initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the permittee shall modify the plan to include procedures for conducting one or more of the following, as appropriate:

    a. Improved preventative maintenance practices;

    b. Process operation changes;

    c. Appropriate improvements to control methods;

    d. Other steps appropriate to correct control performance; and

    e. More frequent or improved monitoring.

    (9 VAC 5-80-110 E and 40 CFR 64.8(a) and (b))

36. **Process Equipment Requirements - (emission unit ID# 13) - Recordkeeping** - The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Southwest Regional Office. These records shall include, but are not limited to:

    a. The pH of the venturi scrubber liquid. (Condition 40 of the 11/19/2019 NSR permit)

    b. The pressure drop through the venturi scrubber. (40 CFR 60.256, Subpart Y)

    c. The water supply pressure to the scrubber. (40 CFR 60.256, Subpart Y)

    d. The total annual hours of thermal dryer operation, calculated monthly as the sum of each consecutive 12 month period. (Condition 40b. of the 11/19/2019 NSR permit

    e. Records of annual calibration of the thermal dryer monitoring devices. (40 CFR 64)

    These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.
    (9VAC 5-50-50, 9 VAC 5-80-110; 40 CFR 60, Subpart Y, and Condition 40 of the 11/19/2019 NSR Permit)

37. **Process Equipment Requirements - (emission unit ID# 13) - Performance Testing** - The permittee shall complete performance testing on the thermal dryer exhaust stack to determine compliance with the emission limits listed in Condition 18 of this permit. The tests shall consist of three runs, each at the maximum production rate of the thermal dryer. The test shall be performed, reported, and compliance demonstrated any time after permit issuance but no later than 18 months prior to the expiration date of this permit. The details of the tests, including approval of test methods for the criteria pollutants, are to be arranged with the Director, Southwest Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. The permittee shall submit notifications for the test protocol submittal. Two copies of the test results shall be submitted to the Director, Southwest Regional Office within 45 days after test completion and shall conform to the test report format enclosed with this permit.
(9 VAC 5-80-110)

38. **Process Equipment Requirements - (emission unit ID# 13) - Testing** - The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.
(9 VAC 5-80-110, 9 VAC 5-50-30, and Condition 21 of the 11/19/2019 NSR permit)

39. **Process Equipment Requirements - (emission unit ID# 13) - Testing** - If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ. Testing conducted to determine compliance with particulate matter and PM10 limits in this permit should be based on methods that measure filterable particulate matter or PM10. Nothing in this condition limits DEQ's authority or ability to request testing for filterable and/or condensable particulate matter emissions.
(9 VAC 5-80-110)

40. **Process Equipment Requirements - (emission unit ID# 09) - Limitations** - Particulate emissions from the coke screening plant shall be controlled by a baghouse and full enclosure. The baghouse and enclosure shall be provided with adequate access for inspection.
(9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-260, and Condition 1 of the 11/19/2019 NSR permit)

41. **Process Equipment Requirements - (emission unit ID# 09a) - Limitations** - Particulate emissions from the oversize coke recirculating conveyor transfer point shall be controlled by an enclosure. The enclosure shall be provided with adequate access for inspection.
(9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-260, and Condition 2 of the 11/19/2019 NSR permit)

42. **Process Equipment Requirements - (emission unit ID# 09c) - Limitations** - Particulate emissions from the transfer of coke to the breeze bunker shall be controlled by partial enclosure. The partial enclosure shall be provided with adequate access for inspection.
(9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-260, and Condition 3 of the 11/19/2019 NSR permit)

43. **Process Equipment Requirements - (emission unit ID#s 09, 09a, 09b, 09c, 09d, 09e, 09f, 30a) - Limitations** - The coke screening plant, associated material handling equipment, and coke breeze storage pile shall each process no more than 801,963 tons of coke per year, calculated monthly as the sum of each consecutive 12-month period.
(9 VAC 5-80-110, 9 VAC 5-80-1180, and Condition 12 of the 11/19/2019 NSR permit)

44. **Process Equipment Requirements - (emission unit ID# 09) - Limitations** - At no time after start-up of the new coke screening plant shall the old coke screening plant, and any associated equipment, be operated.
(9 VAC 5-80-110, 9 VAC 5-170-160, 9 VAC 5-50-260, and Condition 13 of the 11/19/2019 NSR permit)

45. **Process Equipment Requirements - (emission unit ID#s 09, 09a, 09b, 09c, 09d, 09e, 09f, 30a) - Limitations** - Emissions from the operation of the coke screening plant and associated material handling equipment and coke breeze storage pile shall not exceed the limits specified below:

Particulate Matter	30.47 lbs/hr	14.33 tons/yr
PM10	14.42 lbs/hr	6.76 tons/yr
PM2.5	2.19 lbs/hr	1.05 tons/yr

Compliance with these emission limits shall be as stated in Condition 43 of this permit.
(9 VAC 5-80-110, 9 VAC 5-50-260, and Condition 14 of the 11/19/2019 NSR permit)

46. **Process Equipment Requirements - (emission unit ID#s 09, 09a, 09b, 09c, 09d, 09e, 09f, 30a) - Limitations** - Visible emissions from the operation of the coke screening plant and associated material handling equipment and coke breeze storage pile shall not exceed twenty percent (20%) opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown and malfunction.
(9 VAC 5-80-110, 9 VAC 5-170-160, 9 VAC 5-50-20, and Condition 24 of the 11/19/2019 NSR permit)

47. **Process Equipment Requirements - (emission unit ID#s 09, 09a, and 09c) - Monitoring and Recordkeeping** - Compliance with emission limits and opacity shall be determined as follows:

    a. The permittee shall perform visible emission observations on the baghouse (BH01) for the coke screening plant. The visible emissions observations shall be conducted at least once each week during periods of normal facility operation for a sufficient time period to determine the presence of any visible emissions. If no visible emissions are observed, no action shall be required. If, during any visible emission observation, visible emissions are observed (condensed water vapor/steam is not a visible emission), a visible emissions evaluation (VEE) shall be conducted using 40 CFR 60, Appendix A, Method 9, for not less than six minutes. If the average opacity exceeds 20%, modifications and/or repairs shall be performed in a timely manner to correct the problem, and the corrective measures shall be recorded.

b. A record of each visible emissions observation shall be maintained and shall include, at a minimum, the date, time, name of the emission unit, the applicable visible emissions requirement, the results of the observation, and the name of the observer.

c. The baghouse (BH01) filter bags shall be inspected once each week for proper operation and maintenance if required. The permittee shall maintain records of the baghouse filter inspections.

d. The permittee shall perform inspections of the full enclosure for the oversize coke recirculating conveyor and the partial enclosure for the breeze bunker transfer conveyor in the coke screening plant (Conditions 41 and 42 of this permit). The enclosure and partial enclosure shall be inspected once each year for structural integrity. A record of each inspection shall be maintained and shall include, at a minimum, the date, time, the results of the inspection, any corrective action taken, and the inspector.

e. Annual emission limits established for PM, PM10, and PM2.5 emissions in Condition 45 of this permit for the coke screening plant, associated material handling equipment, and coke breeze storage pile are based on the coke processing rate in Condition 43 of this permit. Recordkeeping demonstrating compliance with the coke processing rate in conjunction with the appropriate emission factors can be used to demonstrate compliance with the emission limits.

The permittee shall maintain records of the coke processing rate for the coke screening plant, associated material handling equipment, and coke breeze storage pile, calculated monthly as the sum of each consecutive 12-month period.
(9 VAC 5-80-110)

48. **Process Equipment Requirements - (emission unit ID#s 09, 09a, 09b, 09c, 09d, 09e, 09f, 30a) - Testing** - The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.
(9 VAC 5-50-30 F, 9 VAC 5-80-110, and Condition 21 of the 11/19/2019 NSR permit)

49. **Process Equipment Requirements - (emission unit ID#s 25a, 25b, 25d, 25e) - Limitations** - Particulate emissions from the two Pennsylvania coal crushers (Ref. No. 25a), coal feeders (for Ref. No. 25c), and conveyors (Ref. Nos. 25b and 25d) shall be controlled by an enclosure. The crushed coal transfer point to the existing dried coal conveyor (Ref. No. 25e) shall be enclosed. The enclosures shall be provided with adequate access for inspection.
(9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-260, and Condition 6 of the 11/19/2019 NSR permit)

50. **Process Equipment Requirements - (emission unit ID# 25c) - Limitations** - Particulate emissions from the coal bin (Ref. No. 25c) shall be controlled by a filtration system. The filtration system shall be provided with adequate access for inspection.
(9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-260, and Condition 7 of the 11/19/2019 NSR permit)

51. **Process Equipment Requirements - (emission unit ID# 25c) - Limitations** - Particulate emissions from the coal bin exhaust stack shall not exceed the limitation specified below:

PM/PM10	0.01 gr/dscf

(9 VAC 5-80-110, 9 VAC 5-50-410, and Condition 18 of the 11/19/2019 NSR permit)

52. **Process Equipment Requirements - (emission unit ID#s 25a, 25b, 25d, 25e, 25f, 25g, 25h, 25i, 25j) - Limitations** - Visible emissions from the two Pennsylvania crushers (Ref. No. 25a), coal feeders (Ref. No. 25c), conveyors (Ref. No. 25b, 25d, and 25e), the dryer bypass conveyor (Ref. No. 25f and 25g), the coal truck loadout conveyor (Ref. No. 25h and 25i), and the coal truck loadout (Ref. No. 25j) each shall be less than ten percent (10%) opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).
(9 VAC 5-80-110, 9 VAC 5-170-160, 9 VAC 5-50-410, 40 CFR 60 Subpart Y, and Condition 26 of the 11/19/2019 NSR permit)

53. **Process Equipment Requirements - (emission unit ID# 25c) - Limitations** - Visible emissions from the coal bin exhaust stack shall be less than ten percent (10%) opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).
(9 VAC 5-80-110, 9 VAC 5-170-160, 9 VAC 5-50-410, and Condition 27 of the 11/19/2019 NSR permit)

54. **Process Equipment Requirements - (emission unit ID#s 25a, 25b, 25c, 25d, 25e) - Limitations** - Except where this permit is more restrictive than the applicable requirement, the NSPS equipment (emission unit IDs above) shall be operated in compliance with the requirements of 40 CFR 60, Subpart Y.
(9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-410, and Condition 28 of the 11/19/2019 NSR permit)

55. **Process Equipment Requirements - (emission unit ID# 25c) - Testing** - In accordance with 40 CFR 60.255(d), the permittee shall be exempt from future performance testing for the particulate limit in Condition 51 of this permit provided all of the following requirements are met:

    a. PM emissions, as determined by the most recent performance test, are less than or equal to the applicable limit.

    b. The control device manufacturer's recommended maintenance procedures are followed.

    c. All 6-minute average opacity readings from the most recent performance test are equal to or less than half the applicable opacity limit.

    (9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-410, and Condition 29 of the 11/19/2019 NSR permit)

56. **Process Equipment Requirements - (emission unit ID# 25c) - Testing** - The permittee shall conduct additional performance tests (VEEs) on the coal bin exhaust stack in accordance with 40 CFR 60.257 (a)(1), as follows:

    a. If any 6-minute average opacity reading in the most recent performance test exceeds half the applicable opacity limit, a new performance test shall be conducted within 90

operating days of the date that the previous performance test was required to be completed.

b. Performance testing (based on results from testing in Condition 55.a.) shall be repeated within 12 months of the date that the previous performance test was required to be completed, if the six-minute averages from the previous test were equal to or less than half the applicable opacity standard.

(9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-410, and Condition 30 of the 11/19/2019 NSR permit)

57. **Process Equipment Requirements - (emission unit ID#s 25f, 25g, 25h, 25i, 25j) - Monitoring - Initial Visible Emissions Evaluations** - Visible Emission Evaluations (VEE) in accordance with 40 CFR Part 60, Appendix A, Method 9, shall be conducted on the following equipment: conveyors (Ref. Nos. 25f, and 25h), conveyor transfer points 25g and 25i, and coal truck loadout 25j. The duration of each VEE test shall be one hour (ten 6-minute averages). If, during the initial 30 minutes of the VEE test, all of the 6-minute average opacity readings are less than or equal to 50% of the applicable opacity limit, then the observation period may be reduced from 1 hour to 30 minutes. The details of the tests are to be arranged with the Director Southwest Regional Office. The evaluation shall be performed, and reported within 60 days after achieving the maximum production rate at which the facility will be operated but in no event later than 180 days after start-up of the permitted facility. One copy of the test result shall be submitted to the Director, Southwest Regional Office within 45 days after test completion.
(9 VAC 5-80-110, 9 VAC 5-50-410, and 40 CFR 60, Subpart Y)

58. **Process Equipment Requirements - (emission units 25f, 25g, 25h, 25i, and 25j) - Monitoring** - The permittee shall conduct additional performance tests (VEEs) on conveyors (Ref. Nos. 25f and 25h), conveyor transfer points 25g and 25i, and coal truck loadout 25j in accordance with 40 CFR 60.257 (a)(1), as follows:

a. If any 6-minute average opacity reading in the most recent performance test exceeds 50% of the applicable opacity limit, a new performance test shall be conducted within 90 operating days of the date that the previous performance test was required to be completed.

b. Performance testing shall be repeated within 12 months of the date that the previous performance test was required to be completed, if the six-minute averages from the previous test were equal to or less than 50% of the applicable opacity standard.

(9 VAC 5-80-110, 9VAC 5-50-410, and 40 CFR 60, Subpart Y)

59. **Process Equipment Requirements - (emission units 25f, 25g, 25h, 25i, and 25j) - Monitoring - Alternative Compliance Demonstration** - As an alternative to meeting the requirements in Condition 58, the permittee may elect to comply with the following requirements:

a. Conduct one daily 15-second observation each operating day for each piece of equipment subject to the opacity limit in Condition 53 of this permit (during normal operation) when the coal preparation and processing plant is in operation. Each observation must be recorded as either visible emissions observed or no visible emissions observed. Each observer determining the presence of visible emissions must

meet the training requirements specified in §2.3 of Method 22 of 40 CFR Part 60, Appendix A-7. If visible emissions are observed during any 15-second observation, the owner or operator must adjust the operation of the affected facility and demonstrate within 24 hours that no visible emissions are observed from the affected facility. If visible emissions are observed, a Method 9, of 40 CFR Part 60, Appendix A-4 performance test must be conducted within 45 operating days.

b. Conduct monthly visual observations of all process and control equipment. If any deficiencies are observed, the necessary maintenance must be performed as expeditiously as possible.

c. Conduct a performance test using Method 9 of 40 CFR Part 60, Appendix A-4 at least once every five (5) calendar years for each affected facility.

(9 VAC 5-80-110, 9 VAC 5-50-410, and 40 CFR 60, Subpart Y)

60. **Process Equipment Requirements - (emission unit ID#s 25a, 25b, 25d, 25e) - Monitoring** - The permittee shall conduct ongoing visible emission observations (VEO) on the building enclosure for the crushers and conveyors (Ref. Nos. 25a, 25b, 25d, and 25e) in accordance with 40 CFR Part 60, Appendix A, Method 22, at an interval of not more than 12 months following the previous visible emissions observations or evaluations (VEE) that indicated no visible emissions, as follows:

a. If visible emissions are observed during an ongoing compliance demonstration utilizing Method 22, a visible emissions evaluation (VEE) in accordance with 40 CFR Part 60, Appendix A, Method 9, shall be conducted within 45 days.

b. If any 6-minute average opacity reading during a VEE exceeds half of the applicable visible emissions limit, a follow-up VEE shall be conducted within the next 90 operating days.

c. If all of the 6-minute average opacity readings during a VEE are less than or equal to 50% of the applicable visible emissions limit, a follow-up VEE must be conducted within the next 12 months.

d. If all of the 6-minute average opacity readings during a VEE are zero, a follow-up Method 9 VEE or a Method 22 VEO shall be conducted within the next 12 months.

The permittee may elect to use Method 9 as an alternative to Method 22, and, if Method 9 is used, shall comply with the requirements of 40 CFR 60, Appendix A and with 40 CFR 60.257 (a)(1), Subpart Y.
(9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-410, 40 CFR 60, Subpart Y, and Condition 31 of the 11/19/2019 NSR permit)

61. **Process Equipment Requirements - (emission unit ID#s 25a, 25b, 25d, 25e 25f, 25g, 25h, 25i, 25j) - Recordkeeping** - The permittee shall maintain in a logbook (written or electronic) on-site in accordance with 40 CFR 60.258 (a) and make it available upon request. The logbook shall record the following (for the coal bin exhaust stack and the enclosures for the crushers and conveyors (Ref. Nos. 25a, 25b, 25d, 25e, 25f, and 25h), conveyor transfer points 25g and 25i, and coal truck loadout 25j):

a. The manufacturer's recommended maintenance procedures and the date and time of any maintenance and inspection activities and the results of those activities. Any variance from manufacturer recommendation, if any, shall be noted.

b. The date and time of all periodic coal preparation and processing plant visual observations, noting those sources with visible emissions along with corrective actions taken to reduce visible emissions. Results from the actions shall be noted.

c. The amount of raw coal processed each calendar month, as detailed in Condition 10 of this permit.

d. Monthly certification that the dust suppressant systems (if applicable) were operational when any coal was processed and that manufacturer's recommendations were followed for all control systems. Any variance from the manufacturer's recommendations, if any, shall be noted.

(9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-410, 40 CFR 60, Subpart Y, and Condition 32 of the 11/19/2019 NSR permit)

62. **Process Equipment Requirements - (emission unit ID#s 25a, 25b, 25c, 25d, 25e, 25f, 25g, 25h, 25i, 25j) - Reporting** - Reports shall be provided to the Director, Southwest Regional Office, in accordance with 40 CFR 60.258 (b) and (c) for the coal bin exhaust stack (Ref. No. 25c) and the building enclosure for the crushers and conveyors (Ref. Nos. 25a, 25b, 25d, 25e, 25f, and 25h), conveyor transfer points 25g and 25i, and coal truck loadout 25j, as follows:

a. Semiannual period reports of all 6-minute average opacities that exceed the applicable standard.

b. Results of initial performance tests (for VEEs and particulates).

c. Report the results of initial performance tests to the Administrator or delegated authority, consistent with the provisions of 40 CFR 60.8. The permittee who elects to comply with the reduced performance testing provisions of 40 CFR 60.255(c) or (d) shall include in the performance test report identification of each affected facility that will be subject to the reduced testing. The permittee electing to comply with 40 CFR 60.255(d) shall also include information which demonstrates that the control devices are identical.

d. Within 60 days after the date of completing each performance evaluation conducted to demonstrate compliance with this permit, the permittee shall submit a summary copy to the United States Environmental Protection Agency; Energy Strategies Group; 109 TW Alexander DR; mail code: D243-01; RTP, NC 27711.

(9 VAC 5-80-110, 9 VAC 50-80-1180, 9 VAC 5-50-410, 40 CFR 60, Subpart Y, and Condition 33 of the 11/19/2019 NSR permit)

Miscellaneous Process Equipment Requirements

63. **Miscellaneous Process Equipment Requirements - (Emergency Diesel Generators- Emission Unit Nos. IC-BC, IC-DE, IC-FG) -** There is one emergency stationary "RICE" (reciprocating internal combustion engine) generator on each pushing/charging machine, three generators total. For these engines to be considered an emergency RICE engine, under 40 CFR 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, its operation shall be limited to emergency situations as specified 40 CFR 63.6640(f) and the non-emergency operations identified in 40 CFR 63.6640(f)(3) and (f)(4). If the unit fails to comply with any of the requirements for emergency engines, it will not be considered an emergency engine and shall meet emission standards and other applicable requirements for non-emergency engines.
(9 VAC 5-80-110, 40 CFR 63.6640(f)

    a. In emergency situations, the unlimited use of emergency generators is allowed.

    b. Emergency stationary reciprocating internal combustion engines (RICE) may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by the manufacturer. Required testing of such units should be minimized, but no time limits apply to their use for routine testing and maintenance.

    c. The emergency stationary RICE may be operated for an additional 50 hours per year in non-emergency situations provided the power generated is not sold to generate income to the plant.

(9 VAC 5-80-110 and 40 CFR 63.6640 (f)(2)(i), 63.6640 (f)(2)(ii), and 63.6640 (f)(2)(iii))

Facility-Wide Conditions

64. **Facility-Wide Conditions - Limitations** - Visible emissions from all coke oven exhaust stacks at the facility, the charging of all ovens at the facility, and the thermal coal dryer exhaust stack shall not exceed twenty percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown and malfunction.
(9 VAC 5-80-110, 9 VAC 5-170-160, 9 VAC 5-50-20, and Condition 23 of the 11/19/2019 NSR permit)

65. **Facility-Wide Conditions - Limitations** - Particulate matter emissions from pushing coke, hot coke handling, and coke quenching shall be controlled by a coke side enclosure and a baffled quench tower using cleaned water and fresh water make-up. The coke side enclosure and quench tower shall be provided with adequate access for inspection.
(9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-260, and Condition 5 of the 11/19/2019 NSR permit)

66. **Facility-Wide Conditions - Monitoring** - The permittee shall perform a visible emission observation on the coke oven battery stacks once each week during each week when there is operation. The visible emission observation shall be performed for a brief period of time to identify the presence of visible emissions. If, during any visible emission observation,

visible emissions are observed (condensed water vapor/steam is not a visible emission), a visible emissions evaluation (VEE) shall be conducted using 40 CFR 60, Appendix A, Method 9, for six minutes. If the opacity average is 20% or less, no action shall be required. If the opacity average is higher than 20%, modifications and/or repairs shall be performed to correct the problem. If such correction action fails to correct the problem a VEE using 40 CFR Part 60, Appendix A, Method 9 shall be conducted for 18 minutes to determine compliance with the opacity limit.
(9 VAC 5-80-110 and Condition 23 of the 11/19/2019 NSR permit)

67. **Facility-Wide Conditions - Monitoring** - The permittee shall perform a visible emission observation on the thermal dryer exhaust once each week during each week when there is operation. The visible emission observation shall be performed for a brief period of time to identify the presence of visible emissions. If, during any visible emissions observation, visible emissions are observed (condensed water vapor/steam is not a visible emission), a visible emissions evaluation (VEE) shall be conducted using 40 CFR 60, Appendix A, Method 9, for six minutes. If the opacity average is less than 20%, no action shall be required. If the opacity average is equal to or higher than 20%, modifications and/or repairs shall be performed to correct the problem. If such correction action fails to correct the problem a VEE using 40 CFR Part 60, Appendix A, Method 9 shall be conducted for 18 minutes to determine compliance with the opacity limit.
(Condition 23 of the 11/19/2019 NSR permit; and 40 CFR 60, Subpart Y)

68. **Facility-Wide Conditions - Monitoring** - The permittee shall ensure that the quench tower/recirculating water system is maintained and in proper working order during operation.
(9 VAC 5-80-110)

69. **Facility-Wide Conditions - Monitoring** - Compliance with visible emissions from the charging of all ovens at the facility shall be determined by following the procedures in the emissions control work practice plan per 40 CFR 63.306.
(9 VAC 5-80-110)

70. **Facility-Wide Conditions - Recordkeeping** - The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Southwest Regional Office. These records shall include, but are not limited to:

    a. Results of the VE observations for the coke oven stacks. (9 VAC 5-80-110)

    b. Results of the VE observations for the thermal dryer. (40 CFR 60, Subpart Y)

    c. Maintenance records for the quench tower/recirculating water system. (9 VAC 5-80-110)

    These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.
    (9 VAC 5-50-50, 9 VAC 5-80-110 and 40 CFR 60, Subpart Y)

71. **Facility-Wide Conditions - Testing** - The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.
(9 VAC 5-50-30, 9 VAC 5-80-110, and Condition 21 of the 11/19/2019 NSR permit)

72. **Facility-Wide Conditions - Testing** - If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ. Testing conducted to determine compliance with particulate matter and PM10 limits in this permit should be based on methods that measure filterable particulate matter or PM10. Nothing in this condition limits DEQ's authority or ability to request testing for filterable and/or condensable particulate matter emissions.
(9 VAC 5-80-110)

MACT Standards

73. **MACT Standards - National Emission Standards for Hazardous Air Pollutants for Coke Ovens: Pushing, Quenching, and Battery Stacks, 40 CFR 63, Subpart CCCCC - Limitations - (emission unit ID# 01)** - The Maximum Achievable Control Technology (MACT) Standard for coke ovens, under 40 CFR 63, Subpart CCCCC (National Emission Standards for Hazardous Air Pollutants for Coke Ovens: Pushing, Quenching, and Battery Stacks) was proposed on July 3, 2001, and promulgated on April 14, 2003. The MACT standard is applicable to this facility for the existing coke ovens per 40 CFR 63.7281 and 40 CFR 63.7282.

74. **MACT Standards - 40 CFR 63, Subpart CCCCC - Limitations - (emission unit ID# 01) - Work Practice Standards for Fugitive Pushing Emissions**

    a. The permittee shall visually inspect each oven prior to pushing.

    b. The permittee shall comply with visual inspection requirements before pushing.

    (9 VAC 5-80-110 and 40 CFR 63.7293 (a))

75. **MACT Standards - 40 CFR 63, Subpart CCCCC - Limitations - (emission unit ID# 01) - Quench Tower Requirements -**

    a. The concentration of total dissolved solids (TDS) in the water used for quenching shall not exceed 1100 milligrams per liter.

    b. Each quench tower shall be equipped with baffles such that no more than 5 percent of the cross sectional area of the tower may be uncovered or open to the sky.

    c. The baffles in each quench tower shall be washed once each day that the tower is used to quench coke, except as specified in 40 CFR 63.7295 (b)(2)(i) and (ii).

    d. Each quench tower shall be inspected monthly for damaged or missing baffles and blockage.

    e. Repair or replacement of damaged or missing baffles shall be initiated within 30 days and completed as soon as practicable.

    (9 VAC 5-80-110 and 40 CFR 63.7295 (b)(1)(2)(3)(4))

76. **Facility-Wide Conditions - MACT Standards - 40 CFR 63, Subpart CCCCC - Limitations - (emission unit ID# 01) - Operation and Maintenance Requirements** - The permittee shall prepare a schedule and procedures for the daily washing of baffles.
(9 VAC 5-80-110 and 40 CFR 63.7300 (b)(6))

77. **Facility-Wide Conditions - MACT Standards - 40 CFR 63, Subpart CCCCC - Compliance - (emission unit ID# 01) - General Requirements for Compliance** -

    a. The permittee shall comply with the applicable emission limitations, work practice standards, and operation and maintenance requirements in 40 CFR 63, Subpart CCCCC at all times, except during periods of startup, shutdown, and malfunction as defined in 40 CFR 63.2.

    b. The permittee shall develop a written startup, shutdown, and malfunction plan according to the provisions in 40 CFR 63.6(e)(3).

    (9 VAC 5-80-110 and 40 CFR 63.7310 (a)(c))

78. **Facility-Wide Conditions - MACT Standards - 40 CFR 63, Subpart CCCCC - Testing - (emission unit ID# 01) - Test Methods for Compliance with Quench Water TDS Limits** - The permittee shall determine the total dissolved solids (TDS) concentration of the quench water using Method 160.1 in 40 CFR 136.3 (see "residue - filterable") or acceptable alternative testing method, except that the permittee shall dry the total filterable residue at 103° to 105°C instead of 180°C.
(9 VAC 5-80-110 and 40 CFR 63.7325 (a)(2))

79. **Facility-Wide Conditions - MACT Standards - 40 CFR 63, Subpart CCCCC - Compliance - (emission unit ID# 01) - Continuous Compliance with Applicable Work Practice Standards** -

    a. For each non-recovery coke oven battery subject to the work practice standards in 40 CFR 63.7293(a), the permittee shall demonstrate continuous compliance by maintaining records that document each visual inspection of an oven prior to pushing and that the oven was not pushed unless there was no smoke in the open space above the coke bed and there was an unobstructed view of the door on the opposite side of the oven.

    b. For each coke oven battery subject to the work practice standard for quenching in 40 CFR 63.7295(b), the permittee shall demonstrate continuous compliance according to the following requirements:

    c. Maintain baffles in each quench tower such that no more than 5 percent of the cross sectional area of the tower is uncovered or open to the sky as required in 40 CFR 63.7295 (b)(1).

    d. Maintain records that document conformance with the washing, inspection, and repair requirements in 40 CFR 63.7295 (b)(2), including records of the ambient temperature on any day that the baffles were not washed.

    e. Maintain records of the source of makeup water to document conformance with the requirement for acceptable water in 40 CFR 63.7295 (a)(2).

    (9 VAC 5-80-110 and 40 CFR 63.7334 (c)(e))

80. **Facility-Wide Conditions - MACT Standards - 40 CFR 63, Subpart CCCCC - Reporting - (emission unit ID# 01) - Reporting Requirements -**

    a. The permittee shall submit semiannual compliance reports according to the schedule in 40 CFR 63.7341 (a)(2).

    b. The permittee shall comply with the requirements in 40 CFR 63.7341 (c) for the contents of the semiannual reports, including deviations from an emission limitation and from work practice standards.

    (9 VAC 5-80-110 and 40 CFR 63.7341 (a)(c))

81. **Facility-Wide Conditions - MACT Standards - 40 CFR 63, Subpart CCCCC - Recordkeeping - (emission unit ID# 01) - Records Retention** - The permittee shall comply with the records retention requirements of 40 CFR 63.7342 (a), (c), and (d). (9 VAC 5-80-110 and 40 CFR 63.7342 (a)(c)(d))

82. **Facility-Wide Conditions - MACT Standards - 40 CFR 63, Subpart CCCCC - Recordkeeping - (emission unit ID# 01) - Records Format and Retention Time** - The permittee shall comply with the records format and retention times as required by 40 CFR 63.7343.
    (9 VAC 5-80-110 and 40 CFR 63.7343)

Insignificant Emission Units

83. **Insignificant Emission Units** - The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutant Emitted (5-80-720 B.)	Rated Capacity (5-80-720 C.)
2	Coal Storage Pile #1	720B	PM10	20,000 tons
3	Coal/Coke Storage Pile #2	720B	PM10	20,000 tons
09g	Coke Transfer Chute	720B	PM10	600 tons/hr
09h	Coke Truck Loadout Conveyor	720B	PM10	600 tons/hr
09i	Coke Truck Loadout	720B	PM10	600 tons/hr
11	Main Coke Storage Pile	720B	PM10	140,000 tons
12	Blending Coal/Coke Storage Piles	720B	PM10	500 tons
14	Quench Pit Sludge Storage Piles	720B	PM10	500 tons
17	Quench Dippings	720B	PM10	50 T/hr
18	Baghouse Dust Loadout	720B	PM10	50 T/hr
19	Freeze Treatment AST	720C	VOC	4000 gal each
20	Diesel Tanks	720C	VOC	≤ 10,000 gallon

Emission Unit No.	Emission Unit Description	Citation	Pollutant Emitted (5-80-720 B.)	Rated Capacity (5-80-720 C.)
21	Miscellaneous General Painting	720C	VOC	< 1000 gal/yr total
26	Truck Bin	720C	PM10	100 tons
29	Diesel Lances	720C	-	-
30	Ceramic Welding	720C	-	-
31	Flip Screen	720B	PM10	15 tons/hr
MS-1	Mobil Ground Screener for Coke	720B	PM10	661 tons/hr

Note: AST = aboveground storage tank

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.
(9 VAC 5-80-110)

Permit Shield & Inapplicable Requirements

84. **Permit Shield & Inapplicable Requirements** - Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Applicability
NONE	-	-
-	-	-

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by (i) the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law.
(9 VAC 5-80-140)

General Conditions

85. **General Conditions - Federal Enforceability** - All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.
(9 VAC 5-80-110 N)

86. **General Conditions - Permit Expiration - Permit Expiration** - This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless a timely and complete renewal application consistent with 9 VAC 5-80-80 has been submitted to the Department by the owner, the right of the facility to operate shall be terminated upon permit expiration.
(9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)

87. **General Conditions - Permit Expiration** - The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.
(9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)

88. **General Conditions - Permit Expiration** - If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-150.
(9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)

89. **General Conditions - Permit Expiration** - No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9 VAC 5 Chapter 80.
(9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)

90. **General Conditions - Permit Expiration** - If an applicant submits a timely and complete application under section 9 VAC 5-80-80 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9 VAC 5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.
(9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)

91. **General Conditions - Permit Expiration** - The protection under subsections F 1 and F 5 (ii) of section 9 VAC 5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-80 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.
(9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)

92. **General Conditions - Recordkeeping and Reporting** - All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:

    a. The date, place as defined in the permit, and time of sampling or measurements;

    b. The date(s) analyses were performed;

    c. The company or entity that performed the analyses;

    d. The analytical techniques or methods used;

    e. The results of such analyses; and

    f. The operating conditions existing at the time of sampling or measurement.

    (9 VAC 5-80-110 F)

93. **General Conditions - Recordkeeping and Reporting** - Records of all monitoring data and support information shall be retained for at least five (5) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.
    (9 VAC 5-80-110 F)

94. **General Conditions - Recordkeeping and Reporting** - The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than **March 1** and **September 1** of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

    a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31; and

    b. All deviations from permit requirements. For purpose of this permit, deviations include, but are not limited to:

        (1) Exceedance of emissions limitations or operational restrictions;

        (2) Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or Compliance Assurance Monitoring (CAM) which indicates an exceedance of emission limitations or operational restrictions; or,

        (3) Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.

    c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that "no deviations from permit requirements occurred during this semi-annual reporting period."

    (9 VAC 5-80-110 F)

95. **General Conditions - Annual Compliance Certification** - Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than **March 1** each calendar year a certification of compliance with all terms

and conditions of this permit including emission limitation standards or work practices for the period ending December 31. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. The permittee shall maintain a copy of the certification for five (5) years after submittal of the certification. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

a. The time period included in the certification. The time period to be addressed is January 1 to December 31;

b. The identification of each term or condition of the permit that is the basis of the certification;

c. The compliance status;

d. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance;

e. Consistent with subsection 9 VAC 5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period;

f. Such other facts as the permit may require to determine the compliance status of the source; and

g. One copy of the annual compliance certification shall be submitted to EPA in electronic format only. The certification document should be sent to the following electronic mailing address:

R3_APD_Permits@epa.gov
(9 VAC 5-80-110 K.5)

96. **General Conditions - Permit Deviation Reporting** - The permittee shall notify the Director, Southwest Regional Office, within four daytime business hours after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to Condition 95 of this permit. (9 VAC 5-80-110 F.2 and 9 VAC 5-80-250)

97. **General Conditions - Failure/Malfunction Reporting** - In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours after the malfunction is discovered, notify the Director, Southwest Regional Office by facsimile transmission, telephone or telegraph of such failure or malfunction and shall within 14 days of discovery provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities

subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Director, Southwest Regional Office.
(9 VAC 5-20-180 C)

98. **General Conditions - Severability** - The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.
(9 VAC 5-80-110 G.1)

99. **General Conditions - Duty to Comply** - The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is ground for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application.
(9 VAC 5-80-110 G.2)

100. **General Conditions - Need to Halt or Reduce Activity not a Defense** - It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
(9 VAC 5-80-110 G.3)

101. **General Conditions - Permit Modification** - A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9 VAC 5-80-50, 9 VAC 5-80-1100, 9 VAC 5-80-1605, or 9 VAC 5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios.
(9 VAC 5-80-190 and 9 VAC 5-80-260)

102. **General Conditions - Permit Action for Cause**

a. This permit may be modified, revoked, reopened, and reissued, or terminated for cause as specified in 9 VAC 5-80-110 L, 9 VAC 5-80-240 and 9 VAC 5-80-260. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
(9 VAC 5-80-110 G.4)

b. Such changes that may require a permit modification and/or revisions include, but are not limited to, the following:

(1) Erection, fabrication, installation, addition, or modification of an emissions unit (which is the source, or part of it, which emits or has the potential to emit any regulated air pollutant), or of a source, where there is, or there is potential of, a resulting emissions increase;

(2) Reconstruction or replacement of any emissions unit or components thereof such that its capital cost exceeds 50% of the cost of a whole new unit;

(3) Any change at a source which causes emission of a pollutant not previously emitted, an increase in emissions, production, throughput, hours of operation, or fuel use greater than those allowed by the permit, or by 9 VAC 5-80-1100, unless such an increase in authorized by an emissions cap; or any change at a source which causes an increase in emissions resulting from a reduction in control efficiency, unless such an increase is authorized by an emissions cap;

(4) Any reduction of the height of a stack or of a point of emissions, or the addition of any obstruction which hinders the vertical motion of exhaust;

(5) Any change at the source which affects its compliance with conditions in this permit, including conditions relating to monitoring, recordkeeping, and reporting;

(6) Addition of an emissions unit which qualifies as insignificant by emissions rate (9 VAC 5-80-720 B) or by size or production rate (9 VAC 5-80-720 C);

(7) Any change in insignificant activities, as defined by 9 VAC 5-80-90 D.1.a(1) and 9 VAC 5-80-720 B and 9 VAC 5-80-720 C.

(9 VAC 5-80-110 G, 9 VAC 5-80-110 J, 9 VAC 5-80-240, and 9 VAC 5-80-260)

103. **General Conditions - Property Rights** - The permit does not convey any property rights of any sort, or any exclusive privilege.
(9 VAC 5-80-110 G.5)

104. **General Conditions - Duty to Submit Information** - The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality.
(9 VAC 5-80-110 G.6)

105. **General Conditions - Duty to Submit Information** - Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G.
(9 VAC 5-80-110 K.1)

106. **General Conditions - Duty to Pay Permit Fees** - The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-300 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-350 in addition to an annual permit maintenance fee consistent with the requirements of 9 VAC 5-80-2310 through 9 VAC 5-80-2350. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by **April 15** of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department. The amount of the annual permit maintenance fee shall be the largest applicable base permit maintenance fee amount from Table 8-11A in 9 VAC 5-80-2340, adjusted annually by the change in the Consumer Price Index.
(9 VAC 5-80-110 H, 9 VAC 5-80-340 C and 9 VAC 5-80-2340 B)

107. **General Conditions - Fugitive Dust Emission Standards** - During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:

    a. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;

    b. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;

    c. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or similar operations;

    d. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and,

    e. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

    (9 VAC 5-40-90 and 9 VAC 5-50-90)

108. **General Conditions - Startup, Shutdown, and Malfunction** - At all times, including periods of startup, shutdown, and soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
    (9 VAC 5-50-20 E and 9 VAC 5-40-20 E)

109. **General Conditions - Alternative Operating Scenarios** - Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80, Article 1.
    (9 VAC 5-80-110 J)

110. **General Conditions - Inspection and Entry Requirements** - The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

a. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.

b. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.

c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.

d. Sample or monitor at reasonable times' substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9 VAC 5-80-110 K.2)

111. **General Conditions - Reopening for Cause** - The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-80 F. The conditions for reopening a permit are as follows:

a. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

b. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

c. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-110 D.

(9 VAC 5-80-110 L)

112. **General Conditions - Permit Availability** - Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.
(9 VAC 5-80-150 E)

113. **General Conditions - Transfer of Permits** - No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another.
(9 VAC 5-80-160)

114. **General Conditions - Transfer of Permits** - In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-200.
(9 VAC 5-80-160)

115. **General Conditions - Transfer of Permits** - In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-200.
(9 VAC 5-80-160)

116. **General Conditions - Permit Revocation or Termination for Cause** - A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 1. The Board may suspend, under such conditions and for such period of time as the Board may prescribe any permit for any grounds for revocation or termination or for any other violations of these regulations.
(9 VAC 5-80-190 C and 9 VAC 5-80-260)

117. **General Conditions - Duty to Supplement or Correct Application** - Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.
(9 VAC 5-80-80 E)

118. **General Conditions - Stratospheric Ozone Protection** - If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.
(40 CFR Part 82, Subparts A-F)

119. **General Conditions - Asbestos Requirements** - The permittee shall comply with the requirements of National Emissions Standards for Hazardous Air Pollutants (40 CFR 61) Subpart M, National Emission Standards for Asbestos as it applies to the following: Standards for Demolition and Renovation (40 CFR 61.145), Standards for Insulating Materials (40 CFR 61.148), and Standards for Waste Disposal (40 CFR 61.150).
(9 VAC 5-60-70 and 9 VAC 5-80-110 A.1)

120. **General Conditions - Accidental Release Prevention** - If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.
(40 CFR Part 68)

121. **General Conditions - Changes to Permits for Emissions Trading** - No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.
(9 VAC 5-80-110 I)

122. **General Conditions - Emissions Trading** - Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:

    a. All terms and conditions required under 9 VAC 5-80-110, except subsection N, shall be included to determine compliance.

    b. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.

    c. The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-50 through 9 VAC 5-80-300.

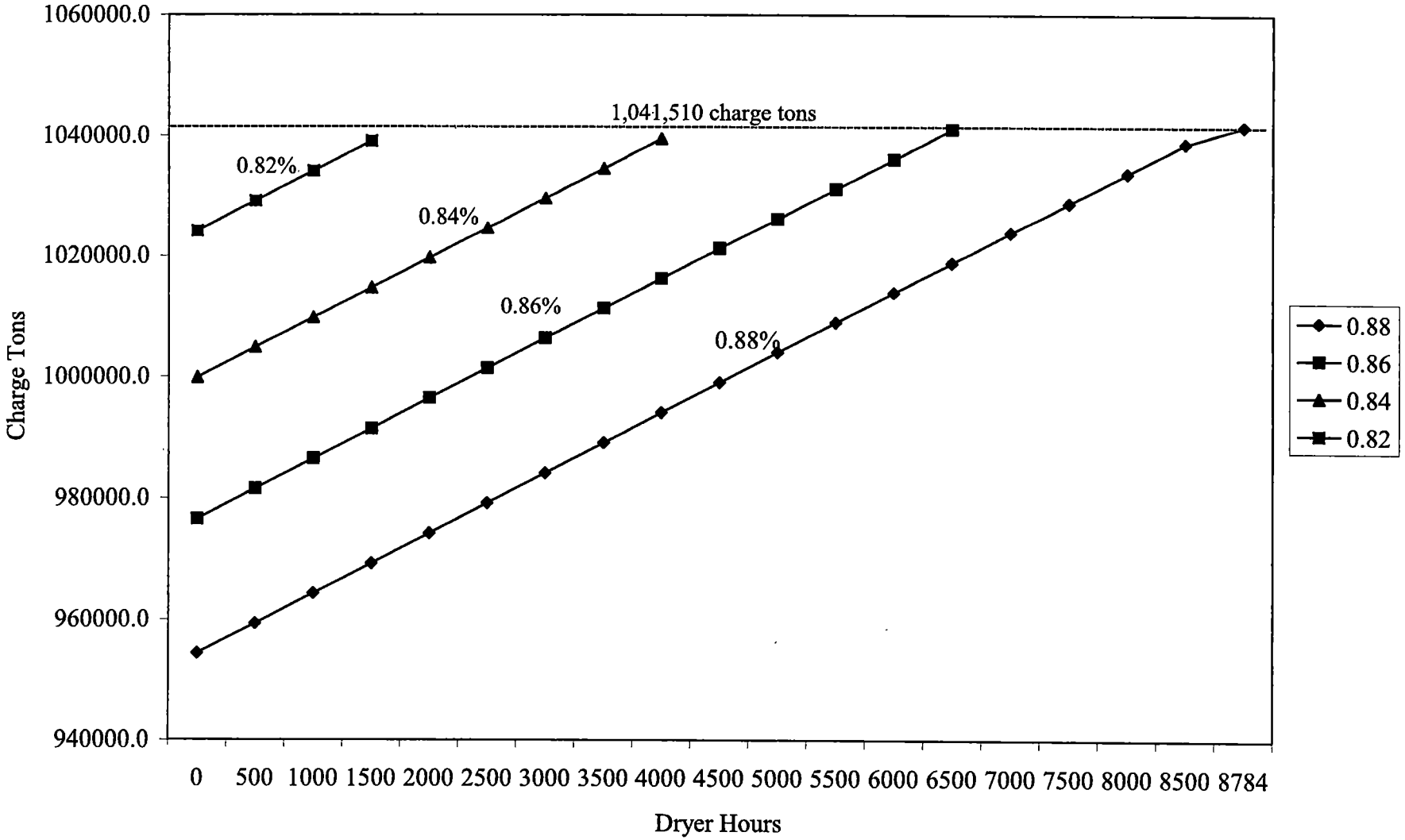
    (9 VAC 5-80-110 I)

ATTACHMENT A

Graph of Dryer Hours, Coal Sulfur, and Charge Tonnage

Dryer Hours, Coal Sulfur and Charge Tonnage

Attachment A



ATTACHMENT B

Work Practice Plan, Jewell Coke Company, L.P.

ATTACHMENT B

SunCoke Energy

Jewell Coal and Coke Company
Vansant, Virginia

Work Practice Control Plan

January 31, 2019

(Previous Review: January 3, 2018)
(Original Issue: November 1993)

Review and Edit Record

January 31, 2019
January 3, 2018
February 2. 2017
November 27, 2013
March 17, 2010
February 2009
February 2008

Audits are performed every six (6) months

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WORK PRACTICE CONTROL PLAN
FOR NON-RECOVERY COKE OVEN

I. Introduction

A. Title 40 of the Code of Federal Regulations Part 63 (40 CFR 63) established the National Emission Standards for Hazardous Air Pollutants (HAPS) for Coke Ovens: Pushing, Quenching, and Battery Stacks. These standards are found in 40 CFR 63, Subpart CCCCC. There are five (5) non-recovery coke oven batteries at Suncoke Energy's Jewell Operations located at Vansant, Virginia which are subject to these standards and requirements. These batteries are identified as 2-D, 2-E, 3-C, 3-F and 3-G. As per the Title V Permit issued Nov. 17, 2017 there is no requirement for a collection hood for controlling pushing/charging emissions from battery 3-B.

B. This program is instituted for compliance with the Environmental Protection Agency Regulation concerning coke oven emissions for non-recovery coke ovens. It is the policy of Suncoke Energy's Jewell Operations to comply with all regulations and, in this regard, all employees are required to follow the guidelines of this program.

C. Contractors on company property shall follow the contents of this program as necessary and as it relates to the jobs being performed by them.

II. Description of Operations

A. Coke Oven Batteries 2-D, 2-E, 3-B, 3-C, 3-F, and 3-G consist of a maximum of 143 non-recovery, horizontal slot Thompson Coke Ovens and operate on the same basic principle. Therefore, the work practices listed within this plan, except where noted, are for all batteries.

III. Door Emission Control Work Practices

Monitoring of each common battery tunnel will be performed daily to ensure the ovens are being operated under a negative pressure. Negative pressure monitoring will be performed by opening a damper in the common tunnel of each battery to ensure air enters the tunnel through the open damper and ensuring the battery is operating under negative pressure. The monitoring will be performed by a burner or other designated person and recorded each day on the form entitled "Record of Monitoring of Common Battery Tunnel Pressure and Work Practice Plan Requirements for Charging Operations".

IV. Charging Emission Control Work Practices

A. The following work practices are procedures designed to minimize visible emissions from each coke oven battery during charging.

B. The Pusher-Charger Machine (PCM) being operated at Batteries 2-D, 2-E, 3-C, 3-F, and 3-G will be operated on the same principle as the PCM operated at the No. 3-B coke oven battery as outlined in this program with the exception the PCMs operated at the 2-D, 2-E, 3-C, 3-F, and 3-G coke oven batteries are equipped with Donaldson Torit Cartridge Filtration Systems and will be utilized as outlined in Section E below.

C. Procedures for Controlling Emissions from Charging Operations

1. After pushing is completed, the coke side door is replaced and the latches on the door are tightened.
2. Dampers are adjusted to help control visible emissions.
3. The PCM Operator then moves the leveler in front of the door of the oven just pushed to fill the oven with coal.
4. When the oven is ready for charging, the PCM Operator will call to receive coal for placement into the oven. A weighed amount of coal is then loaded onto the belt leading to the tripper.
5. The PCM Operator will again remove the door, if not already removed, and start the charging conveyor into the oven as the coal reaches the tripper. The coal is then loaded onto a continuous charging conveyor and is then evenly distributed into the oven. As an option, the door may initially be removed by either the pusher or leveler side door lift.
6. The charging conveyor is to be continuously operated to ensure a rapid and consistent flow of coal to the oven.
7. After the coal is loaded into the oven, the charging conveyor is pulled back out of the oven.
8. The push side Sill Raker will then clean the door sill of any coke, coke breeze, or coal.
9. The door to the oven is then put into place, the latches are tightened, and the PCM will tram to the next oven to be pushed.

Note: Steps 1 and 2 are measures for the purpose of maximizing draft during charging operations.

D. Cleaning of Oven Door Sills

1. The door sills on the coke side of the battery are to be cleaned mechanically, pneumatically, or manually by a Utility Car Operator/Designee after the oven is pushed and prior to the door to that oven is replaced to ensure proper sealing.
2. The door sills on the push side of the battery are to be cleaned by the Sill Raker/Designee after the oven is charged and prior to the door being replaced.
3. After charging of each oven, the pusher side Sill Raker and coke side Utility Car Operator/Designee will observe and remove any coal that might have spilled in an area where it could smolder. In any area where coal spillage occurs, the coal will be cleaned from the door sills or wetted down in other areas to prevent the coal from smoldering. In addition, ceramic fibered material or other means may be used to prevent emissions from smoldering coal.

Note: Due to the ovens operating under negative pressure, damaged doors or other components do not create fugitive emissions.

E. Audit of Performance of Plan Requirements

1. The Coke Oven General Manager will designate an experienced employee to conduct a performance audit of the Work Practice Plan requirements. The audit is to be conducted at least once every six (6) months.
2. The auditor is to use a checklist and audit each phase of the Work Practice Plan requirements as outlined on the "Audit of Performance of Work Practice Control Plan Requirements".

3. The auditor is to report findings to the Coke Oven General Manager and/or Operations Manager. If the auditor reports any deviation from the prescribed procedures, the Coke Oven General Manager is to direct the Operations Manager to provide supplemental refresher training to the personnel elected. The supplemental refresher training is to include a review of the written work practices, on-the-job training, or other training deemed necessary by the Coke Oven General Manager.
4. The Operations Manager is to submit a report to the Coke Oven General Manager when the supplemental training has been complete
5. The following report(s) are to be kept as part of the audit record(s):

    a. Auditor's Reports
    b. Coke Oven General Manager's Corrective Action directing that supplemental training is conducted.
    c. The Superintendent's documentation that the supplemental training has been completed.

V. Startup, Shutdown, and Malfunctions

A. Battery Shutdown Procedures

1. Due to the company production procedures of pushing every other oven the procedure of a battery shutdown would encompass two days with the even numbered ovens being pushed one day and the odd numbered ovens being pushed the next day.
2. During a shutdown of a battery, and as each oven is pushed clear of coke. The door to the oven is replaced, latched down and the door damper is fully closed. The door, door damper, pusher/coke side sole flue and uptake dampers are then sealed with a ceramic fibered material or similar material to exclude as much air as possible.
3. On the second day of shutdown, ovens that were not pushed on the prior shift are cleared of coke and the procedure as outlined in (V)(A)(2) above, is followed.
4. The ovens are allowed to gradually cool down to minimize damage.
5. During a shutdown process in which the ovens of a battery are to be replaced, the cooling down process is not as critical. In this case, the door, sole flue, and uptake dampers are left open after each oven is cleared of coke in order to rapidly cool the oven. Due to the design of the ovens, there would be no emissions as a result of a rapid shutdown.
6. The quenching method is a "batch" procedure that has an associated "start-up" with each oven pushed. The quench tower operates without moving components or practices. When "hot" coke enters the quench tower, cooling water is applied on the coke for a short period of time. The flow of water is then stopped and the "cooled" coke is transported away from the tower. Particulate emissions are controlled by the use of stationary baffles.

B. Battery Startup Procedures

1. During startup procedures for a battery, each oven is pre-heated to a desired temperature.
2. After the ovens reach the desired temperature, they can then be charged. To start off, the ovens are charged with a 24-hour charge of coal. At a point thereafter, not exceeding one month, the ovens are pushed and, in order to start the odd-even process of pushing which this company utilizes, a 48-hour charge of coal is placed in

every other oven. The ovens not charged with a 48-hour charge are charged with a 24 hour charge of coal and are again pushed the next day.

3. After all ovens are placed on 48-hour charges, the ovens are put on a regular schedule and pushed accordingly.
4. The quenching method is a "batch" procedure that has an associated "start-up" with each oven pushed. The quench tower operates without moving components or practices. When "hot" coke enters the quench tower, cooling water is applied on the coke for a short period of time. The flow of water is then stopped and the "cooled" coke is transported away from the tower. Particulate emissions are controlled by the use of stationary baffles.

Note: Due to the nature and design of the ovens at this operation, no additional emissions are produced during startup and shutdown operations.

C. Malfunctions

1. Whenever a malfunction occurs, the next coking cycle may not begin until the cause of the malfunction is determined and corrected, unless it is necessary to initiate the next coking cycle in order to determine the cause of the malfunction.
2. The cause of any malfunction will be determined and, if necessary, corrective measures will be added into this work practice control plan.
3. Should an outage occur to a Donaldson Torit Cartridge Filtration System, work practices that applied to Battery 3-B will be applied to Batteries 2-D, 2-E, 3-C, 3-F and/or 3-G Battery until such time as the collection system is repaired.
4. If an inspection of the quench tower reveals damaged or missing baffles, repairs must be made within 30 days as outlined in 40 CFR.

VI. Training

A. Employees who work in areas where there are potential emissions will receive training in the Work Practices Plan requirements of this program that will be related to their particular work position. Those work positions and the potential emission points are:

1. Pushing Machine Operator - Pusher Side Doors during Pushing and Charging.
2. Supervisors - All Work Practices During Production
3. Burners - Doors during Pushing and Charging and Daily Negative Pressure Monitoring of Common Tunnels.
4. Door Spotter / Sill Raker - Doors during Pushing and Charging.
5. Other Designated Personnel - Work Practice Control Plan Procedures and Daily Negative Pressure Monitoring of Common Tunnels.

B. Subject Area for Initial/Refresher Training

1. Pushing Machine Operator - Job Procedures for Pushing and Charging.
2. Oven Supervisors - Job Procedures for Pushing, Charging, and Doors.
3. Burners - Job Procedures for Doors and daily negative pressure monitoring of Common Tunnels.
4. Door Spotter/Sill Raker - Job Procedures for Doors during Pushing and Charging.
5. Other Designated Personnel - Daily negative pressure monitoring of Common Tunnels.

C. Training Methods

Training will be conducted using one or more of the methods listed below and will be used during initial and/or refresher training:

1. Lectures
2. Video Tape or Visual Aids
3. On-the-Job Training

D. Duration of Training

1. Initial Training
   Employees receiving initial training as listed in this program will, at a minimum, receive 1 hour of training in the aspects of this program through classroom and/or on-the-job training. Based upon the employee's knowledge of the program, additional training may be necessary and will be administered as required.

2. Refresher Training
   Employees receiving refresher training as listed in this program will, at a minimum, receive 1/2 hour of training in the aspects of this program through classroom instruction and/or on-the-job training. Based upon the employees' knowledge of the program, additional training may be necessary and will be administered as required. Refresher training will be performed whenever there is a discrepancy in the work practice plan requirements or whenever there is any change within the program.

E. Demonstration of Successful Completion of Training

1. Employees upon completion of training (Initial or Refresher) will be required to demonstrate successful completion of their training by oral or written examination. The employee's attendance of the required training will be attested by his signature and the last four digits of Social Security Number on a class sign-in sheet at the start of the class or by logging in to the Suncoke University Web Site and completing the prescribed training course material and examination. Successful completion of the class will be attested by the instructor's signature on the sign-in sheet and/or the data base logs of the Suncoke University Web Site.

2. Records of employee attendance will be kept on file by the Department performing the training and will be available for review by hardcopy or data file review.

F. Each employee is required to attend all training classes scheduled for them. This training program includes:

1. Information contained in this Work Practice Control Program that applies to each employee.
2. A review of all written procedures and schedules required by 40 CFR Part 63 for Non-Recovery Coke Ovens.

VII. Record Keeping

A. A record of the daily monitoring of each common battery tunnel for negative pressure and of the daily performance of work plan requirements pertaining to charging operations of each coke oven battery and its emission control equipment will be made by a designated experienced person. This record will be maintained on the form entitled "Record of Monitoring of Common Battery Tunnel Pressure and Work Practice Plan Requirements for Charging Operations" (See Attachment No. 1).

B. A record of the six month audits of the performance of this Work Practice Control Plan will be kept on the form entitled "Audit of Performance of Plan Requirements" (See Attachment No. 2).

C. Records of the "Initial Compliance Certification" and the "Semiannual Compliance Certifications" will be maintained.

D. All other records required by this plan or the requirements of 40 CFR Part 63, Subpart L will be maintained.